

AMENDMENTS TO THE CLAIMS

1. (ORIGINAL) The use of a preparation based on an antibody directed against a tumor-associated glycosylation for preparing a medicament for the prophylactic and/or therapeutic treatment for the reduction or inhibition, respectively, of the growth of tumor cells in a cancer patient by inhibiting glycosylated tumor cell receptors.
2. (CURRENTLY AMENDED) A method of treating a patient to reduce or inhibit the growth of tumor cells in a cancer by inhibiting glycosylated tumor cell receptors, comprising administering to a patient an antibody directed against a tumor-associated glycosylation. The use according to claim 1 for treating a patient in combination with a chemotherapy.
3. (CURRENTLY AMENDED) The method according to claim 1 for treating a patient in combination with a chemotherapy. The use according to claim 1 for treating a chemotherapy resistance.
4. (CURRENTLY AMENDED) The method according to claim 1 for treating a chemotherapy-resistance. The use according to claim 1 for treating the "minimal residual disease".
5. (CURRENTLY AMENDED) The method according to claim 1 for treating the "minimal residual disease". The use according to any one of claims 1 to 4 for preventing the mitogenic stimulation of a tumor cell by the epidermal growth factor (EGF) and/or by heregulin.
6. (CURRENTLY AMENDED) The method according to claim 1 for preventing the mitogenic stimulation of a tumor cell by the epidermal growth factor (EGF) and/or by heregulin. The use according to any one of claims 1 to 5 for the lysis of tumor cells which express a receptor from the family of the EGF receptors.

7. (CURRENTLY AMENDED) The method according to claim 1 for the lysis of tumor cells which express a receptor from the family of the EGF receptors. The use according to any one of claims 1 to 6, characterised in that an antibody is directed against Lewis antigens.

8. (CURRENTLY AMENDED) The method according to claim 1, wherein said antibody is directed against Lewis antigens. The use according to any one of claims 1 to 7, characterised in that an antibody directed against an aberrant glycosylation is used, like Lewis x-, Lewis b- and Lewis y-structures, as well as sialyl Tn, Tn antigen, GloboH, KH1, TF antigen and alpha 1,3-galactosyl epitope.

9. (CURRENTLY AMENDED) The method according to claim 1, wherein said antibody is directed against an aberrant glycosylation. The use according to any one of claims 1 to 8, characterised in that the antibody is a monoclonal antibody, in particular a human, humanized, chimeric or murine antibody.

10. (CURRENTLY AMENDED) The method according to claim 9, wherein said aberrant glycosylation is a Lewis x-, Lewis b- or Lewis-y-structure, sialyl-Tn, Tn antigen, GloboH, KH1, TF antigen or an alpha-1,3-galactosyl epitope. The use according to any one of claims 1 to 9, characterised in that an antibody having an affinity to binding the EGF receptor with a dissociation constant of below a Kd value of 10^{-6} mol/l, preferably less than 10^{-7} mol/l, most preferred 10^{-9} mol/l, or less, is used.

11. (CURRENTLY AMENDED) The method according to claim 1, wherein said antibody is a monoclonal antibody. The use according to any one of claims 1 to 10, characterised in that the antibody is used in a dose of at least 50 mg, preferably at least 100 mg, most preferred at least 200 mg, up to 2 g per patient.

12. (CURRENTLY AMENDED) The method according to claim 11,

wherein said monoclonal antibody is a human, humanized, chimeric or murine antibody. The use according to any one of claims 1 to 11, characterised in that an antibody derivative is used which comprises at least the Fab portion of an antibody and binds to a tumor associated glycosylation.

13. (CURRENTLY AMENDED) The method according to claim 1, characterised in that an antibody having an affinity to binding the EGF receptor with a dissociation constant of below a Kd value of 10^{-6} mol/l, preferably less than 10^{-7} mol/l, most preferred 10^{-8} mol/l, or less, is used. The use according to any one of claims 1 to 12, characterised in that the patient suffers from a cancer with tumor cells which express a receptor from the family of the EGF receptors.

14. (CURRENTLY AMENDED) The method according to claim 1, characterised in that the antibody is used in a dose of at least 50 mg, preferably at least 100 mg, most preferred at least 200 mg, up to 2 g per patient. A pharmaceutical preparation for treating cancer patients and containing an antibody directed against a tumor associated glycosylation at a concentration ranging from 0.1-10%, preferably 1-5%.

15. (CURRENTLY AMENDED) The method according to claim 1, characterised in that an antibody derivative is used which comprises at least the Fab-portion of an antibody and binds to a tumor-associated glycosylation. A preparation for the pharmaceutical and/or diagnostic use, based on an antibody derivative comprising at least a Fab portion of an antibody which binds to a tumor associated glycosylation and has a CDC and ADCC activity of less than 50% of the native antibody.

16. (CURRENTLY AMENDED) The method according to claim 1, characterised in that the patient suffers from a cancer with tumor cells which express a receptor from the family of the EGF receptors. The use according to any one of claims 1 to 13,

~~characterised in that a body fluid or a tissue from a cancer patient is treated ex vivo, in particular bone marrow, blood, serum or organ components.~~

17. (CURRENTLY AMENDED) A pharmaceutical preparation for treating cancer patients and containing an antibody directed against a tumor-associated glycosylation at a concentration ranging from 0.1-10%, preferably 1-5%. The use according to claim 16, characterised in that the cancer patient is treated within the frame of a high dosage chemotherapy.

18. (CURRENTLY AMENDED) A preparation for the pharmaceutical and/or diagnostic use, based on an antibody derivative comprising at least a Fab-portion of an antibody which binds to a tumor-associated glycosylation and has a CDC and ADCC activity of less than 50% of the native antibody. The use according to claim 16, characterised in that the body fluid, or the tissue, respectively, is derived from a patient with the risk of a cancer disease.

19. (CURRENTLY AMENDED) The method according to claim 1, characterised in that a body fluid or a tissue from a cancer patient is treated ex vivo, in particular bone marrow, blood, serum or organ components. A method of producing a preparation based on a body fluid or tissue, in particular bone marrow, blood, serum or organ components, by
- ex vivo treatment of the body fluid or of the tissue with an antibody directed against a tumor associated glycosylation for forming a cellular immune complex, and
- optionally separating the immune complex.

20. (CURRENTLY AMENDED) The method according to claim 19, characterised in that the cancer patient is treated within the frame of a high dosage chemotherapy. A preparation obtainable by a method according to claim 18 and having a reduced content of receptors from the EGF receptor family.

21. (CURRENTLY AMENDED) The method according to claim 19, characterised in that the body fluid, or the tissue, respectively, is derived from a patient with the risk of a cancer disease. A method of determining the risk of metastasis formation in a cancer patient, by

- ~~- providing a sample of a body fluid from a cancer patient,~~
- ~~- contacting said sample with an antibody directed against a tumor associated glycosylation for forming a cellular immune complex of potentially present tumor cells with said antibody, and~~
- ~~- qualitative and/or quantitative determination of the immune complex in the body fluid as a measure of the metastasis forming potential.~~

22. (CURRENTLY AMENDED) A method of producing a preparation based on a body fluid or tissue, in particular bone marrow, blood, serum or organ components, by

- ~~- ex vivo treatment of the body fluid or of the tissue with an antibody directed against a tumor-associated glycosylation for forming a cellular immune complex, and~~
- ~~optionally separating the immune complex.~~ A diagnostic agent, containing an antibody directed against a tumor associated glycosylation in combination with a carrier for separating a cellular immune complex.

23. (CURRENTLY AMENDED) A preparation obtainable by a method according to claim 22 and having a reduced content of receptors from the EGF-receptor family. A diagnostic agent containing an antibody directed against a tumor associated glycosylation in combination with a labelling for determining a cellular immune complex.

24. (NEW) A method of determining the risk of metastasis formation in a cancer patient, by

- providing a sample of a body fluid from a cancer patient,
- contacting said sample with an antibody directed against a tumor-associated glycosylation for forming a cellular immune complex of potentially present tumor cells with said antibody, and
- qualitative and/or quantitative determination of the immune complex in the body fluid as a measure of the metastasis-forming potential.

25. (NEW) A diagnostic agent, containing an antibody directed against a tumor-associated glycosylation in combination with a carrier for separating a cellular immune complex.

26. (NEW) A diagnostic agent containing an antibody directed against a tumor-associated glycosylation in combination with a labelling for determining a cellular immune complex.